

## S2 Table

Parameters ( $\pm$ SEM) <sup>#</sup>	BC				
	Control	Rac1 Inhibitor (NSC23766)	Cdc42 Inhibitor (ZCL278)	Rho Inhibitor (Rhosin)	ROCK Inhibitor (Y-27632)
	<b>0 V/cm</b>				
Trajectory length [ $\mu$ m]	165.87 $\pm$ 5.79	177.53 $\pm$ 26.70	180.87 $\pm$ 8.63*	119.26 $\pm$ 5.30*	169.89 $\pm$ 7.58
Trajectory speed [ $\mu$ m/min]	5.53 $\pm$ 0.19	5.91 $\pm$ 0.89	6.03 $\pm$ 0.29*	3.98 $\pm$ 0.18*	5.66 $\pm$ 0.25
Displacement length [ $\mu$ m]	68.92 $\pm$ 5.16	52.96 $\pm$ 4.27*	64.88 $\pm$ 4.85	32.04 $\pm$ 4.27*	50.15 $\pm$ 5.03*
Displacement speed [ $\mu$ m/min]	2.29 $\pm$ 0.17	1.77 $\pm$ 0.14*	2.16 $\pm$ 0.16	1.07 $\pm$ 0.14*	1.67 $\pm$ 0.17*
Coefficient of movement efficiency CME	0.41 $\pm$ 0.09	0.31 $\pm$ 0.03*	0.36 $\pm$ 0.02	0.27 $\pm$ 0.03*	0.29 $\pm$ 0.02
Average directional cosine $\gamma$	0.06 $\pm$ 0.02	0.08 $\pm$ 0.08	0.19 $\pm$ 0.08*	-0.06 $\pm$ 0.08	-0.06 $\pm$ 0.09

  

Parameters ( $\pm$ SEM) <sup>#</sup>	LC				
	Control	Rac1 Inhibitor (NSC23766)	Cdc42 Inhibitor (ZCL278)	Rho Inhibitor (Rhosin)	ROCK Inhibitor (Y-27632)
	<b>0 V/cm</b>				
Trajectory length [ $\mu$ m]	108.71 $\pm$ 4.33	108.39 $\pm$ 3.86	124.58 $\pm$ 4.50	104.70 $\pm$ 4.12	130.79 $\pm$ 3.36
Trajectory speed [ $\mu$ m/min]	0.72 $\pm$ 0.03	0.72 $\pm$ 0.02	0.83 $\pm$ 0.03	0.70 $\pm$ 0.03	0.87 $\pm$ 0.02
Displacement length [ $\mu$ m]	37.62 $\pm$ 2.63	33.31 $\pm$ 2.49	40.64 $\pm$ 3.62	28.70 $\pm$ 2.57*	31.42 $\pm$ 2.27
Displacement speed [ $\mu$ m/min]	0.25 $\pm$ 0.02	0.22 $\pm$ 0.02	0.27 $\pm$ 0.02	0.19 $\pm$ 0.02*	0.21 $\pm$ 0.02
Coefficient of movement efficiency CME	0.34 $\pm$ 0.02	0.30 $\pm$ 0.02	0.33 $\pm$ 0.02	0.27 $\pm$ 0.02*	0.25 $\pm$ 0.02*
Average directional cosine $\gamma$	0.05 $\pm$ 0.01	0.06 $\pm$ 0.07	0.03 $\pm$ 0.08	-0.08 $\pm$ 0.08	-0.06 $\pm$ 0.08

\*Definitions of parameters and details of the statistics are given in Materials and Methods

\*Statistically significant vs. Control ( $p < 0.05$ )